

IN THE UNITED STATES COURT OF FEDERAL CLAIMS

LARRY GOLDEN,

Plaintiff,

V.

UNITED STATES,

Defendant.

1:13-cv-307-SGB

Judge Susan G. Braden

November 15, 2017

FILED

NOV. 17, 2017
U.S. COURT OF
FEDERAL CLAIMS

PLAINTIFF'S RESPONSE TO DEFENDANT'S MOTION: PLAINTIFF SEEKS

LEAVE TO FILE A MOTION FOR SUMMARY JUDGEMENT

Pursuant to Rule 56(a) Summary Judgment: (a) The Plaintiff's moving for Summary Judgment by identifying each claim----or the part of each claim--on which summary judgment is sought. The Court shall grant Summary Judgment if the Plaintiff (movant) shows that there is no genuine dispute as to any material fact and therefore the Plaintiff (movant) is entitled to judgment as a matter of law.

Pursuant to Rule 56(e)(2)(3) Summary Judgment: (e) Failing to Properly Support or Address a Fact. If a party fails to properly support an assertion of fact or fails to properly address another party's assertion of fact as required by Rule 56(c), the court may: (2) consider the fact undisputed for purposes of the motion; or (3) grant summary judgment if the motion and supporting materials — including the facts considered undisputed — show that the movant is entitled to it...

Received - USCFC

NOV 17 2017

Pursuant to Rule 56(f)(1)(2)(3) Summary Judgment: (f) Judgment Independent of the Motion. After giving notice and a reasonable time to respond, the court may: (1) grant summary judgment for a nonmovant; (2) grant the motion on grounds not raised by a party; or (3) consider summary judgment on its own after identifying for the parties material facts that may not be genuinely in dispute.

The Government Chose to Willfully Disobey the Court's Order to File a Motion to Dismiss Based on Jurisdiction.

The Government chose to willfully disobey the Court's Order to file a Motion to Dismiss based on jurisdiction that was due on October 2, 2017. Teleconference call: "TRANSCRIPT of Proceedings held on May 24, 2017 before Chief Judge Susan G. Braden." (Dkt. No. 118), filed 05/31/2017:

THE COURT: I'm going to deny all of those filings because they violate the order that I entered before allowing jurisdictional discovery, and I ask that no other pleadings be filed.

MR. GOLDEN: Okay. Here's my only question. The Government documents that I am supposed to receive are not necessary fact discovery, they just concentrate on jurisdictional discovery.

THE COURT: That's correct.

THE COURT: What I think makes some sense is for us to have a conference and a scheduling order put together in September. I assume the Government first wants to renew its motion -- jurisdictional motion.

MR. KIM: Yes, Your Honor. We intend to, at the very least, renew part of what we've previously filed.

MR. KIM: Yes, Your Honor. And we also wanted to clarify that, again, based on our review of the various papers, we believe that we may have grounds to move to dismiss on

jurisdictional grounds -- we're going to start with, you know, what we can renew of that first motion.

MR. KIM: And then to be perfectly clear in terms of what Your Honor envisions, this is going to be a renewed motion to dismiss, so this is not going to address issues that were not in our original motion. So whatever we're going to renew --

THE COURT: Whatever -- whatever you want to file by way of a motion for jurisdiction. So we need to clean up whatever I don't have jurisdiction over versus what I do have jurisdiction over.

THE COURT: The Government will file on the 2nd of October a motion to dismiss based on jurisdiction. When that comes in, I'll have a conference call with you and tell you what to do next. Okay?

When the Government copied the Plaintiff an email it sent the Court asking the Court for an extension of time to respond to the Plaintiff's Final Amended Complaint, the Plaintiff did not object to the request because it was not a request for an extension of time to file the Government's Motion to Dismiss based on jurisdiction. It was an extension of time (Dkt. No. 122) to file an answer to Plaintiff's Final Amended Complaint. The Government has wasted 16 months of taxpayers' dollars questioning this Court's jurisdiction of certain devices Plaintiff asserted in his Amended Complaint and Claim Chart (Dkt. Nos. 68 and 69) filed on 02/12/2016 and 02/19/2016 respectfully.

CONTEMPT OF COURT. Any willful disobedience to, or disregard of, a court order or any misconduct in the presence of a court; action that interferes with a judge's ability to administer justice or that insults the dignity of the court.

Pursuant to Rule 56(f)(1)(2)(3) Summary Judgment: (f) Judgment Independent of the Motion. After giving notice and a reasonable time to respond, the court may: (1) grant summary judgment for a nonmovant; (2) grant the motion on grounds not raised by a party; or

(3) consider summary judgment on its own after identifying for the parties material facts that may not be genuinely in dispute.

The Government Chose to Willfully Disobey the Court's Order to File an Answer to Plaintiff's Complaint.

The Government chose to willfully disobey the Court's Order to file an answer to Plaintiff's Complaint. The Government was ordered by the Court (Dkt. No. 122) to file an answer to the Plaintiff's Final Amended Complaint and Final Claim Chart (Dkt. Nos. 120 and 121), filed 09/19/2017. ORDER GRANTING ENLARGEMENT OF TIME:

On September 15, 2017, the Government sent an email to the court, copying Plaintiff, notifying the Court that the Government intended to request an additional 18 days to respond to Plaintiff's August 10, 2017 Complaint, pursuant to Rule of the United States Court of Federal Claims 6(b).

Defendant's Motion for Partial Dismissal of Plaintiff's Final Amended Complaint (Dkt. No. 123), filed 10/20/2017. Quote made by the Government, (pg. 1, first para.):

The United States (the "government") hereby moves to dismiss parts of Plaintiff's Fifth Amended Complaint (Dkt. No. 120, "Fifth Amended Complaint"). In accordance with RCFC 12(a)(4), this motion is being filed in lieu of an answer.

The answer is the Defendant's pleading responsive to the complaint. It is designed to narrow the issues and give the Plaintiff notice of the Defendant's legal defenses, including affirmative defenses, counterclaims, and cross-claims. For each allegation in the complaint, the answer must admit, deny, or deny based on lack of information. See Fed. R. Civ. P. 8(b)(1)(B). The failure to deny any allegation in the complaint, except for the amount of damages, constitutes an admission. See Fed. R. Civ. P. 8(b)(6).

CONTEMPT OF COURT. Any willful disobedience to, or disregard of, a court order or any misconduct in the presence of a court; action that interferes with a judge's ability to administer justice or that insults the dignity of the court.

Pursuant to Rule 56(e)(2)(3) Summary Judgment: (e) Failing to Properly Support or Address a Fact. If a party fails to properly support an assertion of fact or fails to properly address another party's assertion of fact as required by Rule 56(c), the court may: (2) consider the fact undisputed for purposes of the motion; or (3) grant summary judgment if the motion and supporting materials — including the facts considered undisputed — show that the movant is entitled to it...

The Government Chose to Willfully Disobey the Court's Order NOT to File Additional Motions before a Decision is Made on Jurisdiction.

The Government chose to willfully disobey the Court's Order NOT to file any additional Motions before a decision is made on jurisdiction. Plaintiff's motions was dismissed as being untimely because the Court had not ruled on jurisdiction. The Order; (DKT No. 100) filed on 02/03/2017:

On June 3, 2016, Plaintiff filed a Motion for Summary Judgment of Validity. On June 6, 2016, Plaintiff filed: a Motion for Response to Claim Chart; a Motion to "Stay" unselected Devices; and, a Motion for Entry of Devices Supplied to The Government. On June 8, 2016 Plaintiff filed a Motion for Entry of Estimated Damages and Accounting Report. On June 13, 2016, the court issued an order staying these Motions until resolution of the Government's Motion to Dismiss certain Devices.

On June 24, 2016, the Government filed a Motion to Dismiss certain Devices. On November 30, 2016 the court entered an order denying the Government's Motion to Dismiss.

On December 16, 2016, the court entered a Discovery order... In light of the December 16, 2016 Discovery order, the Motions stayed by the June 12, 2016 Order are moot' Therefore, these motions are dismissed without prejudice to being renewed.

Plaintiff's motions was dismissed as being untimely because the Court had not ruled on jurisdiction. The Order; (DKT No. 116) filed on 05/25/2017:

On May 24, 2017, the court convened a telephone status conference, wherein Plaintiff was reminded that he previously was instructed not to file additional pleadings prior to the completion of the court-ordered discovery. During that conference, the court also determined that plaintiff's various motions were untimely, in light of the ongoing discovery and the fact that the court had not yet determined whether it has subject matter jurisdiction to adjudicate Plaintiffs claims.

As such, the court denies all of Plaintiff's pending motions, i.e., the March 1, 2017 Motion For Response To claim chart, ECF No. 102; the March 24, 2017 Motions To Supplement the claim chart and Amended Complaint, ECF Nos. 107-108; the April 11, 2017 Motion For Summary Judgment Of Validity, ECF No. 111; and the May 15, 2017 Motion To Supplement The Amended Complaint, ECF No. 114.

Nevertheless, the court has determined that Plaintiff may amend his complaint and claim chart one final time, prior to the court's ruling on jurisdiction. Plaintiff is ordered not to file any other motions or papers without leave of the court.

Sixteen months back the Government filed a Motion to dismiss certain Plaintiff's devices for lack of subject matter jurisdiction. When the Motion was filed all other proceedings were stayed, included four of Plaintiff's motions. Both the Government and the Plaintiff were instructed the Court's hands are tied and we cannot precede until the Court determines whether or not it has jurisdiction.

Within the Government's latest "Motion for Partial Dismissal of Plaintiff's Fifth Amended Complaint", (DKT No. 123) filed on 10/20/2017, the Government is asking the Court to rule on pleadings that are non-jurisdictional related. The pleadings are as follows:

- Broad Agency Announcements (BAAs) as Government contracts

- Email correspondence
- Bare allegations of infringement
- Validity of the '439 Patent
- No identification of a single claim
- Government "use" of the alleged infringing devices
- Government authorization for the use of smartphones
- The Fifth Amendment Takings of a Patent, and
- Chart of additional alleged infringement devices

None of the above "Motions or Pleadings", embedded in the Government's "Motion for Partial Dismissal of Plaintiff's Fifth Amended Complaint", (DKT No. 123) filed on 10/20/2017 relates to subject matter jurisdiction or an answer to Plaintiff's complaint, and should therefore be denied, dismissed, and/or stricken from the record as being untimely and improper. Further, the "Motions or Pleadings" were introduced into the record after the Court issued several orders and warnings not to submit any more Motions or Pleadings.

CONTEMPT OF COURT. Any willful disobedience to, or disregard of, a court order or any misconduct in the presence of a court; action that interferes with a judge's ability to administer justice or that insults the dignity of the court.

Pursuant to Rule 56(f)(1)(2)(3) Summary Judgment: (f) Judgment Independent of the Motion. After giving notice and a reasonable time to respond, the court may: (1) grant summary judgment for a nonmovant; (2) grant the motion on grounds not raised by a party; or (3) consider summary judgment on its own after identifying for the parties material facts that may not be genuinely in dispute.

**Plaintiff has Suffered Prejudice from the Defendant's Willful Conduct of Delaying;
Resulting from Defendant's Failure to Defend, and Defendant's Failure to Comply with
Court Orders**

Procedural History:

1. Plaintiff filed Complaint on May 1, 2013 (Dkt. No. 1). During the first year the Defendant delayed to prepare a Petition. Defendant never informed the Court or Plaintiff of this Defense prior to filing.
2. On April 30, 2014 (Dkt. No. 44). Defendant petitioned the Patent Trials and Appeals Board to initiate an Inter Partes Review (IPR). Plaintiff asked the Defendant to continue on with the Patent Dependent claims and/or the Government Takings claim. The Defendant moved to have both the Patent Dependent claims and the Government Takings claim "Stayed" for the eighteen (18) months it took the PTAB to issue a decision. (Petitioning the PTAB with non-qualifying patents only created a financial burden to the Plaintiff and a delay in the case)
3. On February 12, 2016 and February 19, 2016 (Dkt. Nos. 68 and 69). Plaintiff filed an Amended Complaint and Claim Chart. On June 10, 2016, the court convened a telephone status conference. Pursuant to that status conference, the Government filed a Motion to Dismiss due by June 30, 2016.
4. On April 13, 2016 (Teleconference meeting). The Court ordered the Government to file its invalidity case. The Government willfully disobeyed the Court order and has fail to file its invalidity case. (This willful conduct and failure to defend has also created a delay)

5. On June 24, 2016, (Dkt. No. 88). The Government filed a Motion to Dismiss certain Devices. During the five (5) months the case was “Stayed” for jurisdictional discovery, the Defendant refused to continue the case with the Plaintiff’s thirty-one (31) remaining infringing claims or Government Takings claim.
6. On November 30, 2016 (Dkt. No. 94). The court entered an order denying the Government’s Motion to Dismiss.
7. On December 16, 2016 (Dkt. No. 97). During the next ten (10) months, with a due date to submit the Motion on October 2, 2017, the case was “Stayed” for jurisdictional discovery, the Defendant refused to continue the case with the Plaintiff’s thirty-one (31) remaining infringing claims or Government Takings claim.
8. On October 2, 2017, Defendant was order to submit its Motion to Dismiss for lack of jurisdiction on this date. The Government willfully disobeyed the Court’s order.
9. On October 20, 2017, Defendant was order to submit its answer to Plaintiff’s Final Amended Complaint (Dkt. No. 120) on this date. The Government willfully disobeyed the Court’s order. (The Government’s willful conduct not to defend has created another delay).
10. In the Plaintiff’s Final Amended Complaint (Dkt. No. 120), there are seventy-two (72) claims of Count 1 Government Takings of a Patent. The Government refuse to defend. (The Government’s willful conduct not to defend is creating another delay).

It is the belief of the Plaintiff that the strategy behind the Defendant’s delay is to suppress Plaintiff’s evidence; thereby increasing the difficulty of discovery. The Plaintiff can’t find any information on certain programs that was very easily public available at one time in the past. Those programs include: DHS “Cell-All” Webcast; DHS “BioWatch” (\$3 billion dollar

contract); DHS “SBInet” (\$8 billion dollar contract); NAVY “CNIT” (\$5 billion dollar contract); DoD “JACKS” (Website for purchasing equipment developed for the Government, e.g. detection equipment).

It is further the belief of the Plaintiff that the Government has colluded with the various Government Agencies named in the Plaintiff’s Amended Complaint not to provide Plaintiff with a response to the 396 FOIA letters Plaintiff mailed out two years ago in the fall of 2015, that the Plaintiff to this date, have not received a response to the subject matter info that relates to Plaintiff’s patents that the Plaintiff requested.

Regarding the delay. Prejudice to the Plaintiff, requires a showing of “‘delay [that] will result in the loss of evidence, create increased difficulties of discovery, or provide greater opportunity for fraud and collusion.’” *Dassault Systems, SA*, 663 F.3d at 842 (quoting *INVST Fin. Grp., Inc. v. Chem-Nuclear Sys., Inc.*, 815 F.2d 391, 398 (6th Cir. 1987)).

Regarding the willful conduct. The Federal Circuit has provided explicit direction on what constitutes willful conduct in considering whether to set aside a default judgment under Rule 60(b)(1). The Federal Circuit counsels that when determining whether culpable conduct of the defaulting party led to the default, the inquiry is whether the defaulting party “intended to violate court rules and procedures.” *Info. Sys. & Networks Corp.*, 994 F.2d at 796. Thus “mere failure to answer” can fall within the definition of Rule 60(b)(1) excusable neglect, requiring a court to “inquire whether the defaulting party willfully declined to follow a court’s rules and procedures.” *Id.*; see *Westec Co.*, 32 Fed. Cl. at 578.

Regarding the failure to defend. The Court is tasked with whether a meritorious defense has been raised by the Government. Such defense is one that if established at trial, would be a complete defense to plaintiff’s claims. See *Westec Co.*, 32 Fed. Cl. at 579. In its motion,

defendant was silent about its expectation to defend against either plaintiff's infringement claims or takings claims. Defendant was further silent about its expectation to defend against Plaintiff's general claim for damages or just compensation, should Plaintiff prevail on liability. Absent comment from Defendant, the court cannot evaluate the merits of Defendant's defense on this record.

Rule 54 (b). Judgment on Multiple Claims or Involving Multiple Parties. When an action presents more than one claim for relief—whether as a claim, counterclaim, or third-party claim—or when multiple parties are involved, the court may direct entry of a final judgment as to one or more, but fewer than all, claims or parties only if the court expressly determines that there is no just reason for delay. Otherwise, any order or other decision, however designated, that adjudicates fewer than all the claims or the rights and liabilities of fewer than all the parties does not end the action as to any of the claims or parties and may be revised at any time before the entry of a judgment adjudicating all the claims and all the parties' rights and liabilities.

Supreme Court affirms “clear and convincing” standard for proving patent invalidity.

Microsoft Corp. v. i4i Limited Partnership (Supreme Court 2011)

The patent act indicates that issued patents are “presumed valid.” 35 U.S.C. § 282. In this case, Microsoft challenged the strength of that presumption — arguing that a low “preponderance” standard for proving invalidity should be sufficient rather than the higher “clear and convincing” standard required by the Court of Appeals for the Federal Circuit. In straightforward language, the Supreme Court writes: “We consider whether §282 requires an invalidity defense to be proved by clear and convincing evidence. We hold that it does.”

It would seem the Government is trying its best to confuse this Court. All of Plaintiff's patents covers communication / monitoring devices with a USPTO inception date of November 17, 2004. The Plaintiff's communication / monitoring device by any other name (e.g. Apple iPhone 7 smartphone, Apple iPhone 8 smartphone, Samsung Galaxy Note 8 smartphone,

Samsung Galaxy S8 smartphone, LG G6 smartphone, or LG V30 smartphone), is still the Plaintiff's communication / monitoring device.

According to the statute, if the Government (e.g. contractor, a subcontractor, or any person, firm, or corporation for the Government), uses without license of the Plaintiff thereof or lawful right, has infringed Plaintiff's claimed invention.

In the year 2008, the Government awarded contracts to NASA and Qualcomm; and cooperative agreements to Apple, Samsung, LG, and Qualcomm for the manufacture of Plaintiff's communication / monitoring device. The contracts and agreements recipients manufactured the Plaintiff's communication / monitoring device without license of the Plaintiff thereof or lawful right.

NASA, Qualcomm, Apple, Samsung, and LG all received an additional implied form of authorization and consent when NASA and Qualcomm was funded by the Government, and when Apple, Samsung, LG, and Qualcomm entered into cooperative agreements with the Government for the manufacture and commercialization of Plaintiff's communication / monitoring device.

The Government cannot use a smartphone of any kind without infringing Plaintiff's claimed invention (e.g. communication / monitoring device). But, to avoid infringing the Government must stripe the smartphones of the following:

- a) All capabilities that enables the smartphone to detect for CBRNE-H agents, compounds, and vitals.
- b) All capabilities that enables the smartphone to detect for chem/bio/human (e.g. heartrate) in smartwatches.

- c) All capabilities that enables the smartphone to lock and unlock doors of homes, buildings, etc.
- d) All capabilities that enables the smartphone to lock and unlock doors of vehicles, and start ignitions of vehicles.
- e) All capabilities that enables the smartphone to control autonomous vehicles stall, stop, and vehicle slowdown.
- f) All capabilities that enables the smartphone to control manned and unmanned vehicles stall, stop, and vehicle slowdown.
- g) All capabilities that enables the smartphone to biometrically identify (e.g. fingerprint, facial, iris).
- h) All capabilities that enables the smartphone to lock after multiple failed attempts to open the smartphone.
- i) All capabilities that enables the smartphone to utilize radio frequency (RF) near-field communication (NFC).
- j) All developments and advancements Qualcomm has made to the smartphone's (communication / monitoring device) central processing unit (CPU).

Qualcomm's responsibility under the Cell-All contract and cooperative agreement was to develop and advance the central processing unit (CPU); capable of evolving with all of the Plaintiff's communication / monitoring device (e.g. smartphone) capabilities listed above, in handling the necessary processing requirements, speed requirements, storage requirements, and connectivity requirements.

It is the responsibility of the Government to challenge Plaintiff's patents and patent claims with the heightened standard of "clear and convincing evidence". It is not proper for the

Government to take a “Backdoor” approach to challenging Plaintiff’s patent claims in the hope of getting the Court to render a decision in favor of the Government based on emotion, rather than on the merits of the Plaintiff’s patent claims. Asking this Court to rule that certain Plaintiff’s patent claims are invalid without having claim construction or a “Marksman Hearing” seems very deceitful, dishonest, and just outright dirty. Such behavior is an insult to the dignity of the Court.

The Government Fail to Introduce New Evidence That Supports Its Motion to Dismiss Certain NSF and NIH Devices Pursuant To RCFC 12(b)(1) and RCFC 12(b)(6)

After ten (10) months of jurisdictional discovery, the Government has fail to introduce any new evidence that supports its “Motion to Dismiss Certain NSF and NIH Devices” Pursuant To RCFC 12(b)(1) and RCFC 12(b)(6). The Government’s renewed argument is the same argument the Government presented in its first Motion to Dismiss Certain Devices on June 24, 2016, (Dkt. No. 88). The only difference is the Government added the National Institute of Health (NIH) to the very same argument. The Government has not shown any disagreement, or has tried to overcome “Memorandum Opinion and Order Denying the Governments Motion to Dismiss. Therefore the Plaintiff is standing on the Court’s resolution and decision to dismiss.

Portions of the decision is as follows:

**MEMORANDUM OPINION AND ORDER DENYING THE
GOVERNMENT'S MOTION TO DISMISS**

SUSAN G. BRADEN, *Judge*.

1. The Government's Argument.

The Government contends that, under section 1498(a), "merely funding an activity does not establish the Government's authorization and consent [to manufacture or use an infringing device]." Gov't Mot. at 5. The February 12, 2016 Amended Complaint alleges

that the Government funded the development of multiple infringing devices through a series of NSF grants ("NSF claims"), but does not allege any other facts to establish the Government's authorization or consent to the manufacture or use of those devices.⁶ Gov't Mot. at 5. Moreover, the February 12, 2016 Amended Complaint does not allege that the NSF-funded devices were used or manufactured "by or for the Government." Gov't Mot. at 5. Therefore, the February 12, 2016 Amended Complaint's NSF claims should be dismissed for failure to state a claim upon which relief can be granted.

Gov't Mot. at 5. The Government also argues—without additional explanation—that the court should dismiss the NSF claims for lack of subject matter jurisdiction. Gov't Mot. 5.

2. Plaintiff's Response.

Plaintiff responds that "[g]rant related agreements [are] contracts within Tucker Act jurisdiction when all the requisite elements of a contract were present, including a government representative with actual authority to bind the government in contract." Pl. Resp. at 7 (quoting *Pennsylvania Dep't of Pub. Welfare v. United States*, 48 Fed. Cl. 785, 790 (2001) ("[g]rant related agreements have been held to be contracts within Tucker Act jurisdiction when all the requisite elements of a contract were present, including a government representative with actual authority to bind the government in contract.")).

The February 12, 2016 Amended Complaint's NSF claims facially involve grant related agreements. Pl. Resp. at 8-9. Therefore, the United States Court of Federal Claims has jurisdiction, under the Tucker Act, to adjudicate those claims. Pl. Resp. at 8.

Plaintiff also argues that the Government's award of NSF grants for the development of infringing devices supports a reasonable inference that the manufacture and use of those devices was "for the Government" and "with the authorization and consent of the Government." Pl. Resp. at 10-11.

3. The Government's Reply.

The Government concedes that NSF Research Grant Awards may be treated as contracts to establish jurisdiction under the Tucker Act, but argues that the existence of a contract is not sufficient to establish liability under section 1498(a). Gov't Reply at 2. Section 1498(a) allows a patent holder to sue the Government only if the infringing manufacture or use of the relevant invention was "for the Government" and "with the authorization or consent of the Government." Some courts have found that the terms of a NSF grant can

satisfy section 1498(a). Gov't Reply at 2 (citing *McMullen Assoc., Inc. v. State Bd. Of Higher Ed.*, 268 F.Supp. 735 (D. Or. 1967)). The grants at issue in those cases, however, reserved property rights in the infringing device to the Government. Gov't Reply at 2. The February 12, 2016 Amended Complaint does not allege that the Government retained a property right in any of the accused devices and fails to allege any other facts that could plausibly establish that the manufacture or use of the patented invention was "for the Government" and "with the authorization or consent of the Government." Gov't Reply at 2-3.

4. The Court's Resolution.

a. The June 24, 2016 Motion To Dismiss The February 12, 2016 Amended Complaint's National Science Foundation Claims, Pursuant To RCFC 12(b)(1), Is Denied.

Under the Tucker Act, the United States Court of Federal Claims has jurisdiction to adjudicate a claim if the statute, regulation, or constitutional provision that is the basis for that claim "can fairly be interpreted as mandating compensation by the Federal Government for the damage sustained," *United States v. Mitchell*, 463 U.S. 206, 217 (1983), and the plaintiff is "within the class of plaintiffs entitled to recover under the statute if the elements of [the] cause of action are established," *Greenlee County, Arizona v. United States*, 487 F.3d 871, 876 (Fed. Cir. 2007). "There is no further jurisdictional requirement that plaintiff if make [] additional nonfrivolous allegation[s] that [he] is entitled to relief under the relevant money-mandating source." *Jan's Helicopter Serv., Inc. v. Federal Aviation Agency*, 525 F.3d 1299, 1307 (Fed. Cir. 2008). Instead, "the consequence of a ruling by the court . . . that plaintiff's case does not fit within the scope of the [money-mandating] source . . . is simply [that] plaintiff loses on the merits for failing to state a claim on which relief can be granted." *Fisher v. United States*, 402 F.3d 1167, 1175-76 (Fed. Cir. 2005).

Here, the February 12, 2016 Amended Complaint's NSF claims are based on section 1498(a), a statute that is money-mandating on its face. *See* 28 U.S.C. § 1498(a) ("Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, *the owner's remedy shall be by action*

against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.") (Emphasis added). Furthermore, Plaintiff is the owner of the United States patents asserted in this case and is therefore entitled to recover under section 1498(a). *See* 28 U.S.C. § 1498(a). Accordingly, the court has jurisdiction to adjudicate the February 12, 2016 Amended Complaint's NSF claims. The Government's June 24, 2016 Motion To Dismiss, pursuant to 12(b)(1), is denied.

b. The June 24, 2016 Motion To Dismiss The February 12, 2016 Amended Complaint's National Science Foundation Claims, Pursuant To RCFC 12(b)(6), is Denied.

The February 12, 2016 Amended Complaint's NSF claims allege sufficient facts to support a reasonable inference that the manufacture and use of the accused devices was "for the Government." *See Iyhal*, 556 U.S. at 678. The NSF claims allege that the Government awarded research grants to develop portable devices that can: (1) identify dangerous chemical, radiological, and bacterial agents; and (2) track the spread of disease.⁷ Based on the alleged facts, it is plausible that the accused devices were used to further the military defense, national security, and public health interests of the United States; policies that the Government has a fundamental interest in advancing.

Accordingly, the court can reasonably infer that the use of the NSF-funded devices was "for the Government." *See, e.g., Hughes Aircraft Co.*, 534 F.2d at 898 (finding that the government's participation in a satellite program was "for the Government," because the program was vital to the military defense and security of the United States); *see also Madey*, 413 F. Supp. 2d at 607 (M.D.N.C. 2006) (explaining that a use is "for the Government" if it is in furtherance and fulfillment of a stated Government policy and for the Government's benefit).

The February 12, 2016 Amended Complaint's NSF claims also allege sufficient facts to plausibly establish that the use of the accused devices was "with the authorization or consent of the Government." Authorization or consent can be implied from the circumstances—"e.g., by contracting officer instructions, [or] specifications or drawings which impliedly sanction and necessitate infringement." *Hughes Aircraft Co.*, 534 F.2d at 901. For example, in *TVI Energy Corp.*, the United States Court of Appeals for the

Federal Circuit held that the Government impliedly sanctioned the use of a patented invention when it issued a solicitation that required bidders to submit for inspection, and perform live demonstrations of, the accused device. *See TVI Energy Corp.*, 806 F.2d at 1060.

In this case, the relevant NSF grants anticipate that the awardees will develop and test the devices proposed in their applications. *See, e.g.*, NSF Award No. 1444240 ("Annual and Final project reports, as required in the NSF Grant Conditions, should document all efforts and outcomes, whether or not they are successful."). Government funding of research that will lead to the development and testing of an accused device supports a reasonable inference that the Government impliedly sanctioned infringing activity.

V. CONCLUSION.

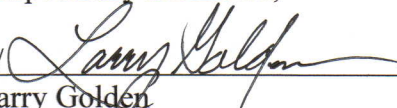
For the reasons discussed herein, the Government's June 24, 2016 Motion To Dismiss Certain Devices, pursuant to RCFC 12(b)(1) and 12(b)(6), is denied.

Notice: Plaintiff is preparing to file with the International Trade Commission (ITC)

Plaintiff estimates the time for filing with the ITC to be on or around January 2, 2018. Although Plaintiff has named Qualcomm as a third party contractor in the present claim, Plaintiff never submitted a claim chart on Qualcomm's infringing activity.

Plaintiff believes Qualcomm is infringing at least Plaintiff's central processing unit (CPU) and operating system (OS) that is running on the CPU. Included with this document is a chart of devices Plaintiff intends to submit as evidence (Exhibit 1), and a Claim Chart for Qualcomm (Exhibit 2).

Respectfully submitted,

S/ 

Larry Golden
Plaintiff, Pro Se

740 Woodruff Rd., #1102
Greenville, South Carolina 29607
atpg-tech@charter.net

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing “Plaintiff’s Response to Defendant’s Motion: Plaintiff Seeks Leave to File a Motion for Summary Judgement” was sent on November 16, 2017 via U.S. Postal service “priority express mail”, to:

NICHOLAS J. KIM
Trial Attorney
Commercial Litigation Branch
Civil Division
Department of Justice
Washington, DC 20530
Email: *Nicholas.J.Kim@USDOJ.gov*
Telephone: (202) 616-8116
Facsimile: (202) 307-0345

EXHIBIT 1

Claims	APPLE Smartphone	Apple Smartwatch	Apple Smartphone and Apple Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 22 of the 9,589,439 Patent	Apple iPhone 8	Apple iWatch Series 3	<p>Apple uses Qualcomm's Snapdragon X16 LTE Modems; model A1863 and A1864 in its iPhone 8 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>
Claim 22 of the 9,589,439 Patent	Apple iPhone 7	Apple iWatch Series 3	<p>Apple uses Qualcomm's MDM9645M X12 modem chipset; model A1660 and A1661 in its iPhone 7 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>

Claims	APPLE Smartphone	Apple Smartwatch	Apple Smartphone and Apple Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 13 of the 9,589,439 Patent	Apple iPhone 8	Apple iWatch Series 3	<p>Apple uses Qualcomm's Snapdragon X16 LTE Modems; model A1863 and A1864 in its iPhone 8 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>
Claim 13 of the 9,589,439 Patent	Apple iPhone 7	Apple iWatch Series 3	<p>Apple uses Qualcomm's MDM9645M X12 modem chipset; model A1660 and A1661 in its iPhone 7 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>

Claims	APPLE Smartphone	Apple Smartwatch	Apple Smartphone and Apple Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 14 of the 9,589,439 Patent	Apple iPhone 8	Apple iWatch Series 3	<p>Apple uses Qualcomm's Snapdragon X16 LTE Modems; model A1863 and A1864 in its iPhone 8 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>
Claim 14 of the 9,589,439 Patent	Apple iPhone 7	Apple iWatch Series 3	<p>Apple uses Qualcomm's MDM9645M X12 modem chipset; model A1660 and A1661 in its iPhone 7 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>

Claims	APPLE Smartphone	Apple Smartwatch	Apple Smartphone and Apple Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE- TDD) and Long-Term Evolution Time- Division Duplex (LTE-TDD)
Claim 19 of the 9,589,439 Patent	Apple iPhone 8	Apple iWatch Series 3	<p>Apple uses Qualcomm's Snapdragon X16 LTE Modems; model A1863 and A1864 in its iPhone 8 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>
Claim 19 of the 9,589,439 Patent	Apple iPhone 7	Apple iWatch Series 3	<p>Apple uses Qualcomm's MDM9645M X12 modem chipset; model A1660 and A1661 in its iPhone 7 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>

Claims	APPLE Smartphone	Apple Smartwatch	Apple Smartphone and Apple Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 20 of the 9,589,439 Patent	Apple iPhone 8	Apple iWatch Series 3	<p>Apple uses Qualcomm's Snapdragon X16 LTE Modems; model A1863 and A1864 in its iPhone 8 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>
Claim 20 of the 9,589,439 Patent	Apple iPhone 7	Apple iWatch Series 3	<p>Apple uses Qualcomm's MDM9645M X12 modem chipset; model A1660 and A1661 in its iPhone 7 for cellular and wireless. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first publicly available LTE service launched on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Evolution of LTE is Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; LTE Direct is a device-to-device technology approximately 500 meters, pioneered by Qualcomm.</p>

Claims	Samsung Smartphone	Samsung Smartwatch	Samsung Smartphone and Samsung Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 22 of the 9,589,439 Patent	Samsung Galaxy Note 8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>
Claim 22 of the 9,589,439 Patent	Samsung Galaxy S8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>

Claims	Samsung Smartphone	Samsung Smartwatch	Samsung Smartphone and Samsung Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 13 of the 9,589,439 Patent	Samsung Galaxy Note 8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>
Claim 13 of the 9,589,439 Patent	Samsung Galaxy S8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>

Claims	Samsung Smartphone	Samsung Smartwatch	Samsung Smartphone and Samsung Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 14 of the 9,589,439 Patent	Samsung Galaxy Note 8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>
Claim 14 of the 9,589,439 Patent	Samsung Galaxy S8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>

Claims	Samsung Smartphone	Samsung Smartwatch	Samsung Smartphone and Samsung Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 19 of the 9,589,439 Patent	Samsung Galaxy Note 8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>
Claim 19 of the 9,589,439 Patent	Samsung Galaxy S8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>

Claims	Samsung Smartphone	Samsung Smartwatch	Samsung Smartphone and Samsung Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 20 of the 9,589,439 Patent	Samsung Galaxy Note 8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>
Claim 20 of the 9,589,439 Patent	Samsung Galaxy S8	Samsung Watch Gear Series 3 Classic	<p>LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011 and Qualcomm's LTE Advanced Pro approved in year 2015; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed the world's first multi-mode chip, combining LTE-TDD, LTE-FDD, and HSPA; Qualcomm's LTE Direct is a device-to-device technology approximately 500 meters. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009; Late 2009, smartphone manufacturers using Snapdragon SoCs.</p>

Claims	LG Smartphone	LG Smartwatch	LG Smartphone and LG Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 22 of the 9,589,439 Patent	LG V30 Smartphone	LG Watch Sport	<p>LG V30 uses a Qualcomm Snapdragon 835 MSM8998 System Chip, a Qualcomm Octa-core, 2450 MHz, Kryo 280, 64 bit, 10 nm Processor; a X16 LTE Modem. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>
Claim 22 of the 9,589,439 Patent	LG G6 Smartphone	LG Watch Sport	<p>LG G6 uses a Qualcomm Snapdragon 821 MSM8996 Pro System Chip; a Qualcomm Quad-core, 2350 MHz, Kryo, 64 bit, 14 nm Processor; a dual-Sim cellular Modem supporting LTE cat. 12/13. LTE is a standard for high-speed wireless for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>

Claims	LG Smartphone	LG Smartwatch	LG Smartphone and LG Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 13 of the 9,589,439 Patent	LG V30 Smartphone	LG Watch Sport	<p>LG V30 uses a Qualcomm Snapdragon 835 MSM8998 System Chip, a Qualcomm Octa-core, 2450 MHz, Kryo 280, 64 bit, 10 nm Processor; a X16 LTE Modem. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>
Claim 13 of the 9,589,439 Patent	LG G6 Smartphone	LG Watch Sport	<p>LG G6 uses a Qualcomm Snapdragon 821 MSM8996 Pro System Chip; a Qualcomm Quad-core, 2350 MHz, Kryo, 64 bit, 14 nm Processor; a dual-Sim cellular Modem supporting LTE cat. 12/13. LTE is a standard for high-speed wireless for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>

Claims	LG Smartphone	LG Smartwatch	LG Smartphone and LG Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 14 of the 9,589,439 Patent	LG V30 Smartphone	LG Watch Sport	<p>LG V30 uses a Qualcomm Snapdragon 835 MSM8998 System Chip, a Qualcomm Octa-core, 2450 MHz, Kryo 280, 64 bit, 10 nm Processor; a X16 LTE Modem. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>
Claim 14 of the 9,589,439 Patent	LG G6 Smartphone	LG Watch Sport	<p>LG G6 uses a Qualcomm Snapdragon 821 MSM8996 Pro System Chip; a Qualcomm Quad-core, 2350 MHz, Kryo, 64 bit, 14 nm Processor; a dual-Sim cellular Modem supporting LTE cat. 12/13. LTE is a standard for high-speed wireless for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>

Claims	LG Smartphone	LG Smartwatch	LG Smartphone and LG Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 19 of the 9,589,439 Patent	LG V30 Smartphone	LG Watch Sport	<p>LG V30 uses a Qualcomm Snapdragon 835 MSM8998 System Chip, a Qualcomm Octa-core, 2450 MHz, Kryo 280, 64 bit, 10 nm Processor; a X16 LTE Modem. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>
Claim 19 of the 9,589,439 Patent	LG G6 Smartphone	LG Watch Sport	<p>LG G6 uses a Qualcomm Snapdragon 821 MSM8996 Pro System Chip; a Qualcomm Quad-core, 2350 MHz, Kryo, 64 bit, 14 nm Processor; a dual-Sim cellular Modem supporting LTE cat. 12/13. LTE is a standard for high-speed wireless for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>

Claims	LG Smartphone	LG Smartwatch	LG Smartphone and LG Smartwatch, Components: Operating system (OS), Chipset, Central Processing Unit (CPU), Long-Term Evolution Time-Division Duplex (LTE-TDD) and Long-Term Evolution Time-Division Duplex (LTE-TDD)
Claim 20 of the 9,589,439 Patent	LG V30 Smartphone	LG Watch Sport	<p>LG V30 uses a Qualcomm Snapdragon 835 MSM8998 System Chip, a Qualcomm Octa-core, 2450 MHz, Kryo 280, 64 bit, 10 nm Processor; a X16 LTE Modem. LTE is a standard for high-speed wireless communication for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>
Claim 20 of the 9,589,439 Patent	LG G6 Smartphone	LG Watch Sport	<p>LG G6 uses a Qualcomm Snapdragon 821 MSM8996 Pro System Chip; a Qualcomm Quad-core, 2350 MHz, Kryo, 64 bit, 14 nm Processor; a dual-Sim cellular Modem supporting LTE cat. 12/13. LTE is a standard for high-speed wireless for mobile devices; LTE standard finalized in Dec. 2008; first public LTE service on Dec. 14, 2009 as data connection with USB modem. Samsung SCH-r900 world's first LTE Mobile phone starting Sep. 21, 2010; Samsung Galaxy Indulge world's first LTE smartphone starting on Feb. 10, 2011; Qualcomm's LTE Advanced standardized in March 2011; Qualcomm and Samsung co-developed the 4G telecommunications technology LTE-TDD; Qualcomm developed world's first multi-mode chip, combining LTE-TDD, LTE-FDD; Qualcomm's LTE Direct is a device-to-device technology. First Qualcomm Snapdragon processor ship Nov. 2007; Dual-core Snapdragon SoCs late 2009 for smartphone manufacturers.</p>

EXHIBIT 2

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>12. The communication device of [claim 11] wherein each communication device includes at least one of an internet connection, a GPS connection, a radio frequency (RF) connection, or a central processing unit (cpu).</p>	<p>Central Processing Unit (CPU) Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>16. The communication device of [claim 11] wherein the communication device can be adapted or incorporated with cell phone towers and satellites for use with satellite communication and/or a cell tower, wi-fi, wi-max, broadband, GPS, navigation, radio frequency (RF) chips, radio frequency (RF) sensors, radio frequency (RF) transceivers, and radio frequencies for short and long range transmissions interconnected to the central processing unit (cpu).</p>	<p>NFC Wireless Networking Technology Industry</p>	<p>NFC chips might also be widely used in the Internet of Things. Qualcomm recently announced that it will include NXP's near-field communication (NFC) solution in the Snapdragon processor platform that powers mobile devices (e.g. smartphones), wearables (e.g. smartwatches), and automobiles</p>
<p>21. The communication device of [claim 11] wherein the communication device includes a power connection that is interconnected to the central processing unit (cpu) and power source can be battery, electrical, or solar.</p>	<p>Central Processing Unit (CPU) Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>22. The communication device of [claim 11] wherein the communication device is designed to be equipped with applications for the locking, disabling a lock, enabling a lock, and unlocking the locks of, but not limited to, containers, vehicles, houses and businesses, using a smart phone, cell phone, PDA, laptop or desktop.</p>	<p>Home and Community Wireless Networking Technology Industry</p>	<p>Every time you call, navigate, download, store something or talk, you've got the power of Qualcomm technology to thank. Also the advancements for your car, home and community are made possible by the mobile hardware, software and standards we pioneered. Qualcomm invented many of the technologies that the world's leading networks and devices run on—connecting new industries, services and experiences that are changing everything.</p>
<p>22. The communication device of [claim 11] wherein the communication device is designed to be equipped with applications for the locking, disabling a lock, enabling a lock, and unlocking the locks of, but not limited to, containers, vehicles, houses and businesses, using a smart phone, cell phone, PDA, laptop or desktop.</p>	<p>Disabling Lock Locking Industry</p>	<p>Qualcomm Technologies announced SafeSwitch in September of 2014. SafeSwitch is available to customers through its Qualcomm Snapdragon 810 processors. SafeSwitch technology - addresses mobile security threat with a kill switch solution is designed to allow device owners to remotely disable their devices in the event that they're lost or stolen - and then re-enable them in the event they're found. This helps to protect sensitive, valuable personal data and to deter device theft.</p>
<p>30. The communication device of [claim 11] wherein the communication device is designed to be used with or without biometrics for authentication and identification, with at least one of a fingerprint recognition, voice recognition, face recognition, hand geometry, retina scan, iris scan, heart rate, pulse or signature, thereby allowing access to the product by authorized, trained, and equipped individuals and preventing access to the product by unauthorized, untrained, and unequipped individuals.</p>	<p>Biometrics Biometrics Industry</p>	<p>Authenticating the user and the device. Beyond secure fingerprint identification, a Snapdragon 835 Mobile Platform provides a user with an extra level of safety using Camera Security—a camera-based biometric solution for iris and facial recognition engineered to help enhance mobile device security</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>30. The communication device of [claim 11] wherein the communication device is designed to be used with or without biometrics for authentication and identification, with at least one of a fingerprint recognition, voice recognition, face recognition, hand geometry, retina scan, iris scan, heart rate, pulse or signature, thereby allowing access to the product by authorized, trained, and equipped individuals and preventing access to the product by unauthorized, untrained, and unequipped individuals.</p>	<p style="text-align: center;">Biometrics</p> <p style="text-align: center;">Biometrics Industry</p>	<p>Mobile transactions are safest when they are protected by a combination of user and device authentication methods. This helps data remain secure from the moment a user logs into their device. A Snapdragon 835 Mobile Platform contains the Qualcomm Haven™ security platform—a combination of hardware, software and biometrics technologies that help to make online banking and payments more secure than ever.</p>
<p>39. The lock disabler system of [claim 33] wherein the automatic/mechanical lock disabler detection device has a power connection which is interconnected to the central processing unit (cpu) and includes a power source of battery, electrical or solar.</p>	<p style="text-align: center;">Central Processing Unit (CPU)</p> <p style="text-align: center;">Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>41. The lock disabler system of [claim 33] wherein the automatic/mechanical lock disabler detection device includes at least one of: a Blue tooth connection, a Wi-Fi connection, a short and long range radio frequency connection, an Internet connection, a Cellular connection, a Satellite connection, all of which are capable of being interconnected to a central processing unit (cpu) of the communication device.</p>	<p style="text-align: center;">Central Processing Unit (CPU)</p> <p style="text-align: center;">Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>55. The multi-sensor detection system of [claim 33] wherein each communication device includes at least one of an internet connection, a GPS connection, a radio frequency (RF) connection, or a central processing unit (cpu).</p>	<p>Central Processing Unit (CPU)</p> <p>Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>78. The built-in, embedded multi sensor detection system of [claim 74] wherein the product includes at least one of a built-in, embedded internet component, a global positioning (GPS) component, a navigation component, a tracking component, a cellular component, a satellite component, a short and long range radio frequency component, radio frequency (RF) sensor, radio frequency (RF) transceiver, Wi-Fi, antenna, Bluetooth, or interface/gateway component.</p>	<p>Cellular and Wireless Modem: Smartwatches</p> <p>Electronic Device Industry</p>	<p>Qualcomm supplied the LTE modem in the Apple Watch Series 3. TechInsights found the Qualcomm MDM9635M, a Snapdragon X7 LTE modem in the 42mm sport band model A1861 with GPS + cellular it opened up. The modem was mated in a package-on-package with a Samsung K4P1 G324EH DRAM in the watch. Among other wireless chips, TechInsights said the watch contains a Qualcomm PMD9645 PMIC and a WTR3925 RF transceiver. Apple and Qualcomm are embroiled in a handful of patent infringement disputes including investigations at the U.S. ITC, particularly around baseband modems. Apple continues to use the Qualcomm parts in watches despite threats of injunctions. Apple decided to discontinue paying Qualcomm royalties while court cases are in progress.</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>78. The built-in, embedded multi sensor detection system of [claim 74] wherein the product includes at least one of a built-in, embedded internet component, a global positioning (GPS) component, a navigation component, a tracking component, a cellular component, a satellite component, a short and long range radio frequency component, radio frequency (RF) sensor, radio frequency (RF) transceiver, Wi-Fi, antenna, Bluetooth, or interface/gateway component.</p>	<p>Cellular and Wireless Modem: Smartphone</p> <p>Mobile Device Industry</p>	<p>The iPhone X A1865 uses the Qualcomm MDM9655 Snapdragon X16 LTE modem. iPhone 8; Qualcomm Modem Model A1663; plus 802.11ac Wi-Fi with MIMO; Bluetooth 5.0 wireless technology; NFC with reader mode. iPhone 8 Plus; Qualcomm Modem Model A1664; plus 802.11ac Wi-Fi with MIMO; Bluetooth 5.0 wireless technology; NFC with reader mode. iPhone 7; Qualcomm Modem Model A1660; plus 802.11ac Wi-Fi with MIMO; Bluetooth 4.2 wireless technology; NFC with reader mode. iPhone 7 Plus; Qualcomm Modem Model A1661; plus 802.11ac Wi-Fi with MIMO; Bluetooth 4.2 wireless technology; NFC with reader mode. The Qualcomm MDM9625M is a modem LTE chipset found in the Apple MG9M2CL/A iPhone 6 Plus and iPhone 6.</p>
<p>78. The built-in, embedded multi sensor detection system of [claim 74] wherein the product includes at least one of a built-in, embedded internet component, a global positioning (GPS) component, a navigation component, a tracking component, a cellular component, a satellite component, a short and long range radio frequency component, radio frequency (RF) sensor, radio frequency (RF) transceiver, Wi-Fi, antenna, Bluetooth, or interface/gateway component.</p>	<p>Wi-Fi</p> <p>Wireless Networking Technology Industry</p>	<p>With all the devices connecting to all the things, we knew we had to help ease overload. So we were the first to announce end-to-end commercial support for the next generation of Wi-Fi. What does that mean? It translates into faster delivery and longer battery life for Wi-Fi devices—whether you're at home or on the go.</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>79. The built-in, embedded multi sensor detection system of [claim 74] wherein the product includes at least one of a built-in, embedded wireless and/or wired communication connection capable of sending signals and messages to a product; receiving signals and messages from a product; interconnected to at least one of a cell phone, a smart phone, a PDA, a handheld, a laptop, a desktop, a workstation, monitoring site or another product comprises a built-in, embedded wireless and/or wired communication connection.</p>	<p>Modems</p> <p>Wireless Networking Technology Industry</p>	<p>Qualcomm quote: "Some say the modem is the most important part of your smartphone. We couldn't agree more. With our wireless modem inside your smartphone, you've got years of engineering keeping you connected to your great big world. And isn't that why you bought that device in the first place?"</p>
<p>79. The built-in, embedded multi sensor detection system of [claim 74] wherein the product includes at least one of a built-in, embedded wireless and/or wired communication connection capable of sending signals and messages to a product; receiving signals and messages from a product; interconnected to at least one of a cell phone, a smart phone, a PDA, a handheld, a laptop, a desktop, a workstation, monitoring site or another product comprises a built-in, embedded wireless and/or wired communication connection.</p>	<p>LTE</p> <p>Wireless Networking Technology Industry</p>	<p>Everyone promises smarter/better/faster, but with LTE, we actually delivered. We invented the wireless standards and fundamental technologies that mobile operators rely on to meet the explosive demand in mobile data traffic. And that means you can catch up on the latest sports clips without waiting for the network to keep pace.</p>
<p>104. The multi-sensor detection system of [claim 103] wherein each cell phone detector case includes an internet connection, a GPS connection, a radio frequency (RF) connection, a recharging cradle or seat, a front side, a top, a bottom, a pair of opposed sides and a central processing unit (cpu).</p>	<p>Central Processing Unit (CPU)</p> <p>Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>108. The multi-sensor detection system of [claim 103] wherein the cell phone, the smart phone, and the cell phone detector case can be adapted or incorporated with cell phone towers and satellites for use with at least one of satellite communication, a cell tower, wi-fi, wi-max, broadband, GPS, navigation, radio frequency (RF) chips, radio frequency (RF) sensors, radio frequency (RF) transceivers, and radio frequencies for short and long range transmissions interconnected to a central processing unit (cpu).</p>	<p>Central Processing Unit (CPU)</p> <p>Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>113. The multi-sensor detection system of [claim 103] wherein the cell phone, the smart phone, and the cell phone detector case includes a power connection that is interconnected to a central processing unit (cpu), and wherein a power source can be battery, electrical, or solar.</p>	<p>Central Processing Unit (CPU)</p> <p>Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>126. The multi-sensor detection system of [claim 125] wherein each communication device includes at least one of an internet connection, a GPS connection, a radio frequency (RF) connection, or a central processing unit (cpu).</p>	<p>Qualcomm Snapdragon Processor: Smartwatches</p> <p>Industry for Processors</p> <p>Electronic Device Industry</p>	<p>Samsung Gear S2 3G Watch (Qualcomm Snapdragon 400 Processor); Samsung Gear S Watch (Qualcomm Snapdragon 400 Processor); LG Watch Sport (Qualcomm Snapdragon Wear 2100 Processor); LG Watch Style (Qualcomm Snapdragon Wear 2100 Processor); LG G Watch R (Qualcomm Snapdragon 400 Processor); LG Watch Urban (Qualcomm Snapdragon 400 Processor).</p>

Complainant RE43,990 Patent Claims	Qualcomm's Technological Capability and Industry	Qualcomm's Technological Capability (Description)
<p>126. The multi-sensor detection system of [claim 125] wherein each communication device includes at least one of an internet connection, a GPS connection, a radio frequency (RF) connection, or a central processing unit (cpu).</p>	<p>Qualcomm Snapdragon Processor: Smartphone</p> <p>Industry for Processors</p> <p>Mobile Device Industry</p>	<p>Samsung Galaxy S8 (Qualcomm Snapdragon 835 Processor); Samsung Galaxy Note 8 (Qualcomm Snapdragon 835 Processor); Samsung Galaxy S7 (Qualcomm Snapdragon 820 Processor); Samsung Galaxy S5 (Qualcomm Snapdragon 801 Processor); Samsung Galaxy S4 (Qualcomm Snapdragon 600 Processor); LG V30 (Qualcomm Snapdragon 835 Processor); LG G5 (Qualcomm Snapdragon 820 Processor); LG G4 (Qualcomm Snapdragon 808 Processor); LG G3 (Qualcomm Snapdragon 801 Processor); LG Pro 2 (Qualcomm Snapdragon 800 Processor).</p>
<p>132. The multi-sensor detection system of [claim 125] wherein the internal or external remote/electrical lock disabler includes at least one of: a Blue tooth connection, a Wi-Fi connection, a short and long range radio frequency connection, an Internet connection, a Cellular connection, a Satellite connection, all of which are interconnected to the central processing unit (cpu).</p>	<p>Central Processing Unit (CPU)</p> <p>Industry for Processors</p>	<p>Snapdragon is a suite of system on a chip (SoC) semiconductor products designed and marketed by Qualcomm for mobile devices. The Snapdragon system on chip (SoC) was announced in November 2006. The Snapdragon central processing unit (CPU) uses a single SoC that may include multiple CPU cores, a wireless modem, and other software and hardware to support a smartphone's global positioning system (GPS), camera, gesture recognition and video</p>
<p>134. The multi-sensor detection system of [claim 125] wherein a communication device, that of a cell phone, smart phone or handheld; capable of sending signals to a vehicle's operating equipment systems of at least one of, but not limited to, an ignition for starting and stopping, a lock for unlocking and locking, a horn for sounding; capable of receiving data and diagnostic information of the vehicle's operating equipment systems.</p>	<p>Car</p> <p>Automobile Industry</p>	<p>Every time you navigate you've got the power of Qualcomm technology to thank. All the advancements coming to your car, home and community are made possible by the mobile hardware, software and standards we pioneered. Qualcomm invented many of the technologies that the world's leading networks and devices run on.</p>